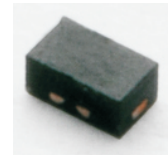


CPDQT5V0-HF

RoHS Device
Halogen Free

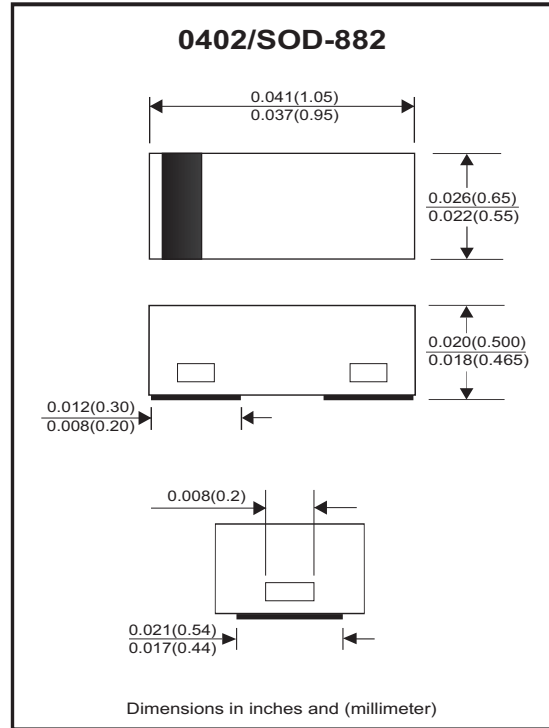


Features

- IEC61000-4-2 Level 4 ESD protection.
- ESD Rating of Class 3 per Human Body Mode.
- Peak Power up to 150 Watts @ 8x20µs Pulse.
- Low Leakage current.
- Response Time is Typically <1ns
- Working Voltage: 5V

Mechanical data

- Case: 0402/SOD-882 small outline plastic package.
- Terminals: Matte tin plated, solderable per MIL-STD-750, method 2026.
- Mounting position: Any.
- High temperature soldering guaranteed: 260°C/10 second.
- Weight: 0.001 grams(approx.).



Circuit Diagram



Maximum Rating and Electrical Characteristics

(at TA=25°C unless otherwise noted, VF=0.9V Max. @ IF=10mA for all types)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Maximum working Peak Reverse Voltage		VRWM			5.0	V
Maximum diode breakdown voltage	IR = 1mA	VBR	5.6			V
Maximum reverse leakage current	VR = 3.5V VR = 5V	IR			0.3 0.5	µA
Junction capacitance	VR = 0V, f = 1MHz	CT		15		pF
ESD capability	IEC 61000-4-2(air)	ESD			15	kV
	IEC 61000-4-2(Contact)	ESD			8	kV
Clamping Voltage	I _{PP} = 5 A, tp=8/20us	Vc		11.6		V
	I _{PP} = 9.4 A, tp=8/20us	Vc			18.6	V
Peak Pulse Power	TP=8/20us	PPK			174	W
Junction temperature		Tj	-55		150	°C
Operation temperature range		TOP	-40		125	°C
Storage temperature range		TSTG	-55		155	°C

NOTES:

1. VBR is measured with a pulse test current IR at an ambient temperature of 25°C.

Company reserves the right to improve product design , functions and reliability without notice.

REV:C

RATING AND CHARACTERISTIC CURVES (CPDQT5V0-HF)

Fig. 1 - Pulse Waveform

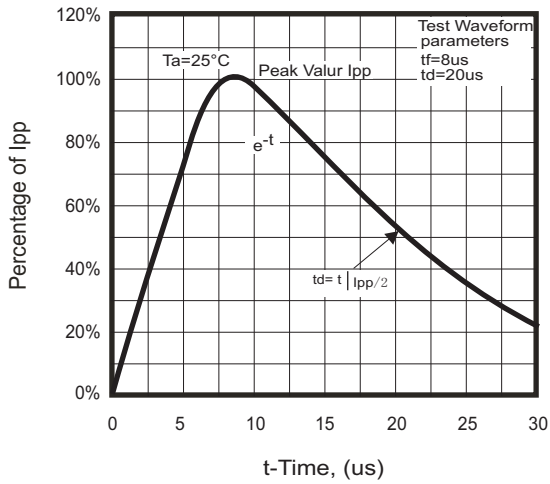
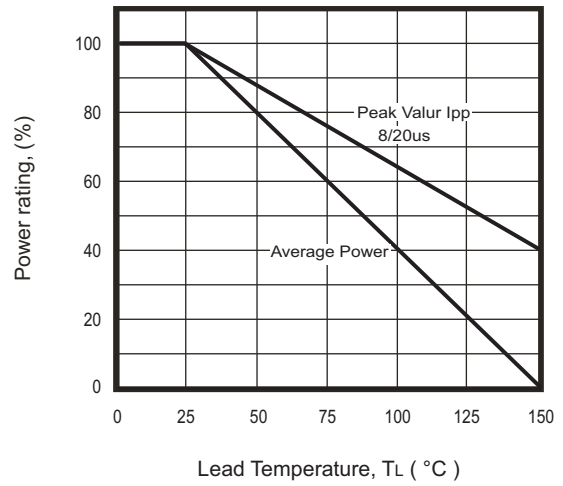
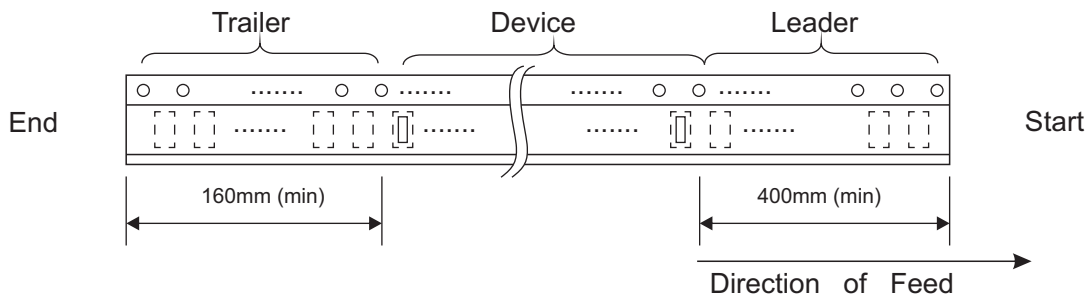
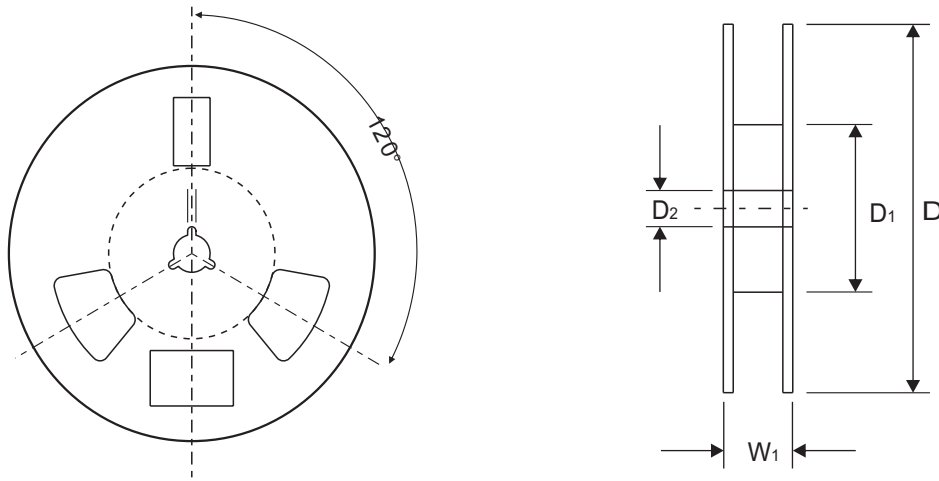
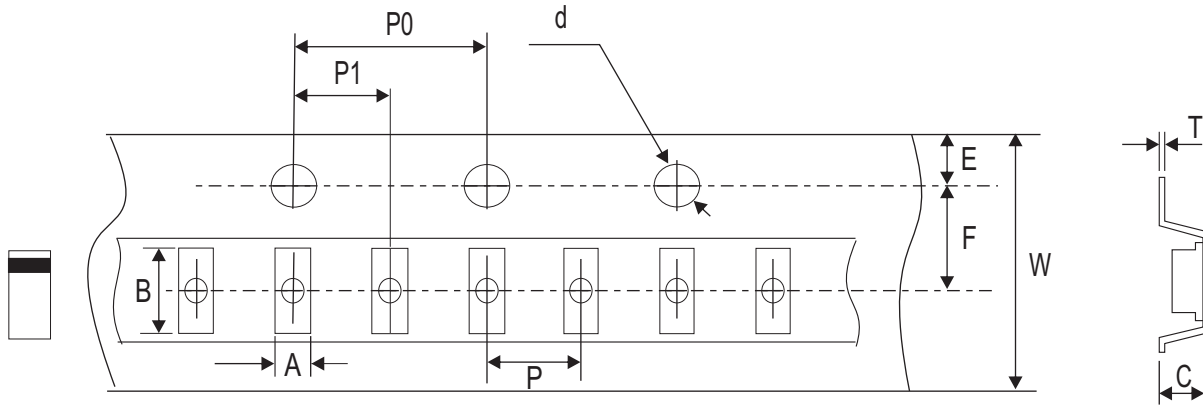


Fig. 2 - Power Derating Curve



Reel Taping Specification

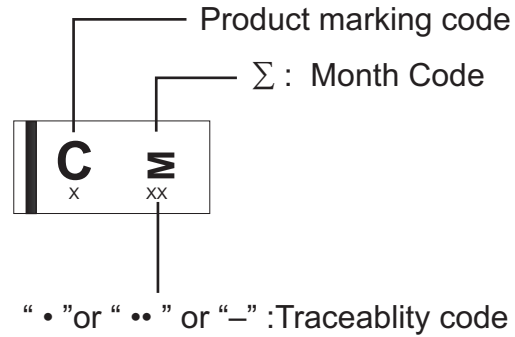


0402 (SOD-882)	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(mm)	0.70 ± 0.05	1.12 ± 0.05	0.55 ± 0.05	1.50 + 0.10 - 0	178.00 Max.	50.00 Min.	13.00 ± 0.50
	(inch)	0.028 ± 0.002	0.044 ± 0.002	0.022 ± 0.002	0.059 + 0.004 - 0	7.008 Max.	1.969 Min.	0.512 ± 0.020

0402 (SOD-882)	SYMBOL	E	F	P	P ₀	P ₁	T	W	W ₁
	(mm)	1.75 ± 0.10	3.50 ± 0.05	2.00 ± 0.05	4.00 ± 0.10	2.00 ± 0.05	0.229 ± 0.02	8.30 Max.	10.90 Max.
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.079 ± 0.002	0.157 ± 0.004	0.079 ± 0.002	0.009 ± 0.001	0.327 Max.	0.429 Max.

Marking Code

Part Number	Marking Code
CPDQT5V0-HF	C



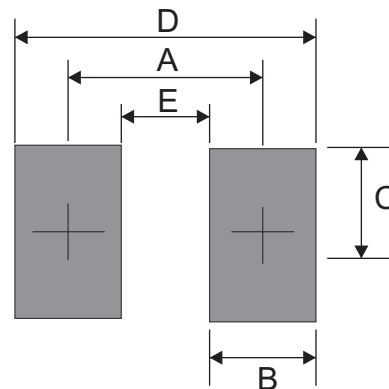
Month Code:

Month	Odd Year (per A.D.)	Even Year (per A.D.)
Jan	1	E
Feb	2	F
Mar	3	H
Apr	4	J
May	5	K
Jun	6	L

Month	Odd Year (per A.D.)	Even Year (per A.D.)
Jul	7	N
Aug	8	P
Sep	9	U
Oct	T	X
Nov	V	Y
Dec	C	Z

Suggested PAD Layout

SIZE	0402/SOD-882	
	(mm)	(inch)
A	0.70	0.028
B	0.40	0.016
C	0.70	0.028
D	1.10	0.043
E	0.30	0.012



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
0402/SOD-882	10,000	7